CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER: 75-456/458

BIOEQUIVALENCE

Enalaprilat

Abbott labs

1.25 mg/mL I.V. injection (VIAL)

Abbott Park, Il 600643537

ANDA # 75-458

Submission Date:

Reviewer: Pradeep Sathe

November 23, 1998

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Review of a Bioequivalence Study Waiver Request

Category: ACE inhibitor.

Indication: Treatment of hypertension when oral therapy is not

practical

RLD: Vasotec® 1.25 mg/mL injection (VIAL) by Merck & Co.

Possible First Generic: Yes

Formulation Composition:

INGREDIENTS	TEST mg/mL	REFERENCE mg/mL
Enalaprilat	1.25	1.25
Sodium Chloride Benzyl Alcohol	9	9
Sodium Hydroxide to adjust to pH Water		•

The injection is filled as a 1 mL fill in 2 mL vial and 2 mL fill in 2 mL vial.

COMMENTS:

- Enalarpilat is the active ingredient. Benzyl alcohol is a preservative, sodium chloride is the isotonicity adjuster and sodium hydroxide is for adjusting pH to
- 2. The active ingredient, route of administration, dosage form and strength for Enalaprilat injection is same as those of the innovator product Vasotec® 1.25 mg/mL injection by Merck & Co. The concentration of sodium chloride in the RLD is mg/ml while in the test it is _____; a difference of mg/ml which amounts to less than _____ The test product is therefore considered to have essentially similar Q and Q.

3. The indications and end use is identical to the innovator formulation.

RECOMMENDATION:

The Division of bioequivalence agrees that the information submitted by Abbott Labs. Demonstrates that Enalaprilat 1.25 mg/mL I.V. injection falls under 21 CFR section 320.22 (b) (1) of the Bioavailability/Bioequivalence regulations. The waiver of invivo bioequivalence study for Enalaprilat 1.25 mg/mL I.V. injection of the test product is granted. From the bioequivalence point of view, the Division of Bioequivalence deems the test injectable formulation to be bioequivalent to Vasotec® 1.25 mg/mL injection manufactured by Merck & Co.

Pradeep M. Sath

Division of Bioequivalence

Review Branch II

RD INITIALED SGNerurkar, Ph.D.

FT INITIALED SGNerurkar

Dale P. Conner, Pharm.D.

Director, Division of Bioequivalence

Enalaprilat

1.25 mg/mL I.V. injection (carpuject)

ANDA # 75-456

Reviewer: Pradeep Sathe

Abbott labs

Abbott Park, Il 600643537

Submission Date: November 28, 1998

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Review of a Bioequivalence Study Waiver Request

Category: ACE inhibitor.

Indication: Treatment of hypertension when oral therapy is not

practical

RLD: Vasotec® 1.25 mg/mL injection by Merck & Co.

Possible First Generic: Yes

Formulation Composition:

	TEST	REFERENCE
INGREDIENTS	mg/mL	mg/mL
Enalaprilat	1.25	1.25
Sodium Chloride		
Benzyl Alcohol	9	9
Sodium Hydroxide to adjust to pH		
Water for Injection g.s.		

The innovator product is marketed only in vials. Abbott is marketing this product in a syringe (carpuject).

COMMENTS:

- 1. Enalarpilat is the active ingredient. Benzyl alcohol is a preservative, sodium chloride is the isotonicity adjuster and sodium hydroxide is for adjusting pH
- 2. The active ingredient, route of administration, dosage form and strength for Enalaprilat injection is same as those of the innovator product Vasotec® 1.25 mg/mL injection by Merck & Co. The concentration of sodium chloride in the RLD is mg/ml while in the test it is ng/ml; a difference of mg/ml which amounts to less than The test product is therefore considered to have essentially similar Q and Q.

3. The indications and end use is identical to the innovator formulation.

RECOMMENDATION:

The Division of bioequivalence agrees that the information submitted by Abbott Labs. Demonstrates that Enalaprilat 1.25 mg/mL I.V. injection (carpuject) falls under 21 CFR section 320.22 (b)(1) of the Bioavailability/Bioequivalence regulations. The waiver of in-vivo bioequivalence study for Enalaprilat 1.25 mg/mL I.V. injection of the test product is granted. From the bioequivalence point of view, the Division of Bioequivalence deems the test injectable formulation to be bioequivalent to Vasotec® 1.25 mg/mL injection manufactured by Merck & Co.

Pradeep M Sathe, Ph.D.

Division of Bioequivalence

Review Branch II

RD INITIALED SGNerurkar, Ph.D

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Date 1/11/1999

Concur: hahf- forh
Dale P. Conner, Pharm.D.

Director, Division of Bioequivalence